



Figure 3.6 Farms and flood levels

‘FARMING THE NILE’

Imagine you’re an Ancient Egyptian farmer. For food, you depend on the crops you grow in the fields marked on the drawing in Figure 3.7.

The flood is occasionally high enough to bring water to all six of your fields. At other times, only one or two fields receive any water. Table 3.1 shows the flood heights, and which fields will be flooded.

TABLE 3.1 THE CHANCE OF FLOODING

Height of flood, in metres	Fields flooded
1	1
2	1 and 2
3	1 to 3
4	1 to 4
5	1 to 5
6	1 to 6

Table 3.2 below enables you to record details of each year's floods, how much grain you store or how much extra grain you use, and the number of surviving family members.

HOW TO PLAY

- The height of the flood is a matter of chance. Throw the dice once in order to see how many fields are flooded for one year. For example, if you throw a '4', four fields are flooded.
- Copy Table 3.2 and record the number of fields flooded each year. You'd usually expect three fields to be flooded. If more fields are flooded, this means extra grain can be stored for future use.
- For each extra field of grain, place an 'S' in the 'Extra grain to be stored' column.
- Cross out an 'S' for each extra crop used in order to prevent famine in bad years.
- You need grain from at least three fields in order to prevent famine. If less than three fields are flooded, you have to make up the shortage from your extra grain stored over previous years.
- If you're unable to provide at least two fields of crops, from either the flooded fields or your stores, one member of your family of seven dies.

- 24 In small groups, play the game. As you play, write a year-by-year report describing your situation over ten years. The first four years are written as an example. Continue from there.

AN EXAMPLE OF A REPORT

- *Year one:* The floods covered four fields. There was one extra field of crops to store.
- *Year two:* Three fields were flooded. There was enough food.
- *Year three:* Only two fields were flooded, so there weren't enough crops. One extra stored crop had to be used, but nobody starved.
- *Year four:* Only two fields were flooded. No stored crops were left, so one family member died of starvation.

- 25 How many of your family members survived after ten years of relying on the river?
- 26 How much grain did you have after ten years?
- 27 Why do you think people didn't build their villages in the hills, well away from the floods?
- 28 (a) Imagine you rely on a river for your survival and are told that if a dam was built,
- you'd never have to worry about water again
 - water would be released for your farm at any time you needed it for irrigation
 - your village wouldn't ever be flooded again
- What do you think most people would say if this was suggested? Explain.
- (b) Compare your answers with those of other class members.

TABLE 3.2 YEARLY RECORDS

Year	Roll of the dice	Number of fields flooded	Extra grain to be stored	Family members still alive
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Did you know?

During the 1980s, the Tasmanian state government wanted to build a hydroelectric dam in one of the state's wilderness areas. The dam, however, would flood parts of the Franklin and Lower Gordon rivers. Local people protested against the dam. The federal government passed a law that made the area a part of the Tasmanian Wilderness World Heritage Area, which meant that the state government couldn't build the dam.